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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,876	01/10/2001	Yasuo Himuro	Q62523	6217

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EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/756,876	HIMURO, YASUO
	Examiner	Art Unit
	Steven D. Maki	1733

-- The MAILING DATE of this communication app ars on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14* is/are allowed.

6)☒ Claim(s) *1-13 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-15-03 has been entered.

2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3) Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1 last two lines, the scope and meaning of "a main slant groove wall and the slope of the first auxiliary land part are continuous in a circumferential direction of the tire" (emphasis added) is ambiguous. Is this language requiring joining the first auxiliary land part and the wall(s) of the main slant groove or something else such as not requiring such joining but excluding transverse sipes in the main slant groove wall and the slope of first auxiliary land part. In claim 1, it is suggested to change the last two lines to --the slope of the first auxiliary land part joins the groove walls of the main slant groove--.

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6) **Claims 1 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hutson et al (US 5746849).**

Hutson et al discloses a pneumatic tire having a tread including a center rib 104 and three rows of blocks on each side of the tire. Each block of an inner row has "a plane form of approximately a triangle" wherein the width of the block 30, 32 "gradually increases" from a side of the equatorial plane toward a side of the tread end. See figure 1 and 2. The blocks 30 and 32 are connected by a tie bar 66. The height of the tie bar varies along the length of the tie bar such that the radial height of the tie bar is greatest at point 96 and least at point 98. The tie bar strengthens and stiffens otherwise less stiff portions of the block. See col. 4 lines 41-62.

As to claims 1 and 15, the claimed tire is anticipated by the tire of Hutson et al. The claimed rib-shaped reads on center rib 104. The claimed first slant land parts read on blocks 30, 32. The claimed main slant grooves read on the lateral grooves 80.

In claims 1 and 15, the claimed groove bottom reads on a portion of the bottom of the lateral groove 80 defined by the tie bar and extending from point 98 (the lower height location). The claimed first auxiliary land part reads on the remaining portion of

the bottom of the lateral groove defined by the tie bar including the bottom of the lateral groove 90 defined at point 96 (the higher height location). With respect to "a main slant groove wall and the slope of the first auxiliary land part are continuous in a circumferential direction of the tire [the slope of the first auxiliary land part joins the groove walls of the main slant groove]" (claim 1) and "first auxiliary land part ... is circumferentially bordered along the entire slope by the first slant land parts" (claim 15), Hutson et al teaches this subject matter since the tie bar 66 is joined to both blocks 30 and 32. In other words, claim 1 reads on a groove bottom and first auxiliary land part being defined by tie bar having varying height.

7) **Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutson et al (US 5746849) in view of Baumhofer et al (US 5240053).**

Hutson et al, which is discussed above, is considered to anticipate claim 1. In any event: As to claim 1, it would have been obvious to one of ordinary skill in the art to extend Hutson et al's tie bar 66 only partially across the length of the lateral groove (and thereby define a "groove bottom" distinguishable from a "first auxiliary land part") depending on the desired amount of stiffening since (1) Hutson uses the tie bar to stiffen the blocks (col. 4 lines 58-59) and (2) Baumhofer et al teaches increasing stiffness by using a connecting means (tie bar) 14 which extends only partially along the length of the lateral groove (col. 4 line 58 to co. 5 line 5, figure 4.

As to claim 11, it would have been obvious to incline the surface of the tie bar at the claimed 135-170 degrees since Hutson et al and Baumhofer et al teach gradually changing the height of the tie bar to increase stiffness.

8) **Claims 3, 6, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutson et al (US 5746849) in view of Baumhofer et al (US 5240053) as applied above and further in view of Japan '202 (4-19202).**

As to claim 3, it would have been obvious to include a circumferential fine groove ("fine" being a relative term) in the center rib of Hutson et al since (a) the directional tread of Hutson et al, which has a rib in the central region, is for wet surfaces (col. 1 lines 5-10) and (2) Japan '202 suggests providing a relatively narrow circumferential grooves between a pair of ribs in a central region of a directional tread pattern having excellent draining performance (figure 1).

As to claim 6, it would have been obvious to provide the side blocks of Hutson et al with the inner convex wall of blocks 7a, 7b of Japan '202 (the side blocks thereby having the claimed gradually increasing width) since (a) the directional tread of Hutson et al is for wet surfaces as noted above and (b) Japan '202 teaches using such blocks (illustrated in figure 2) so that the opening width of the peripheral groove is widened and drainage is thereby improved. The limitations of the second auxiliary land part as set forth in claims 8 and 12 would have been obvious Hutson et al and Baumhofer et al teach using tie bars having gradually changing height to increase stiffness.

9) **Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutson et al (US 5746849) in view of Baumhofer et al (US 5240053) and Japan '202 (4-19202) as applied above and further in view of Fontaine (WO 99/17944) or Japan '909 (JP 62-194909).**

As to claims 4 and 5, it would have been obvious to provide the circumferential groove with the claimed shape (narrow top and wide bottom / flasked shaped) in view of Fontaine's suggestion to use such a circumferential groove as a center groove in a directional tread in order to remove water from the footprint (figure 4) or Japan '909's suggestion to use such a circumferential groove to increase wet performance and to reduce noise (figure 1-2).

Allowable Subject Matter

10) **Claims 1-13 would be allowable if (1) claim 1 is rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and (2) claim 1 is amended to include the subject matter shown in figure 2a (e.g. amended to insert --from the tread surface-- after "decreases" on line 12 of claim 1.** Hutson et al teaches that the height of the tie bar decreases from a location *below* the tread surface instead of decreasing *from* the tread surface. There is no suggestion in the prior art of record to increase the height of the tie bar of Hutson et al at point 96 so that the height of the tie bar gradually decreases from the tread surface.

Claims 2, 7, 9, 10 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 14 is allowed.

Remarks

11) The prior art rejection using Japan '024 has been withdrawn in view of amended claim 1 and new claims 14 and 15 filed 10-15-03.

Applicant's arguments with respect to claims 1, 3-6, 8, 11-12 and 15 have been considered but are moot in view of the new ground(s) of rejection.

12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068 until Dec. 18, 2003 and (571) 272-1221 after Dec. 18, 2003. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
December 10, 2003

STEVEN D. MAKI 12-10-03
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733